

İzmir University of Economics, Department of Mathematics

MATH 205 ANALYTIC GEOMETRY

Quiz 1

11.10.2004

Name

Student No.

Sign

You will not get any points if your answer is wrong, that is no points to your explanations if your answer is wrong. And of course no points to a correct answer if your explanation or proof is not correct or clear.

YOU must write GOOD Mathematics

1. Find the Pythagorean triple $(r^2 - s^2, 2rs, r^2 + s^2)$ whose hypotenuse has length 229.

Solution:

2. Show that the point $P(x, y)$ which is some fraction, say t where $0 \leq t \leq 1$, of the way from the point $A(x_0, y_0)$ to the point $B(x_1, y_1)$ has coordinates

$$x = (1 - t)x_0 + tx_1, \quad y = (1 - t)y_0 + ty_1$$

Solution: